

Title (en)  
COATING METHOD FOR PRODUCING A COMBINATION OF ARMOR PLATING FOR A BLADE TIP AND EROSION RESISTANT COATING

Title (de)  
ABDECKVERFAHREN ZUR HERSTELLUNG EINER KOMBINATION VON SCHAUFELSPITZENPANZERUNG UND EROSIONSSCHUTZSCHICHT

Title (fr)  
PROCEDE DE RECOUVREMENT DESTINE A PRODUIRE UNE COMBINAISON DE BLINDAGE D'EXTREMITÉ D'AUBES ET COUCHE DE PROTECTION CONTRE L'EROSION

Publication  
**EP 3093372 A3 20170111 (DE)**

Application  
**EP 16167274 A 20160427**

Priority  
DE 102015208783 A 20150512

Abstract (en)  
[origin: US2016333706A1] A method for manufacturing a blade (1) for a turbomachine, the blade having a hardfacing on its tip (4) and an erosion-protection coating (13) at least on its airfoil (3) is provided. Initially, a blade tip hardfacing is applied to the blade tip and, subsequently, a mask (10) is positioned in the region of the blade tip hardfacing, the mask covering the blade tip hardfacing, and, subsequently, the erosion-protection coating is deposited. The mask is removed after the erosion-protection coating is completed. A blade for a turbomachine, the blade having a hardfacing on its tip (4) and an erosion-protection coating (13) at least on its airfoil (3) is also provided. The erosion-protection coating at least partially covers the blade tip hardfacing, and the thickness of the erosion-protection coating decreases continuously in and/or toward the region of the blade tip hardfacing.

IPC 8 full level  
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Citation (search report)  
• [XAI] EP 2317078 A2 20110504 - ALSTOM TECHNOLOGY LTD [CH]  
• [A] DE 102005060712 A1 20070621 - MTU AERO ENGINES GMBH [DE]  
• [A] EP 2031186 A2 20090304 - UNITED TECHNOLOGIES CORP [US]  
• [A] EP 1085171 A2 20010321 - GEN ELECTRIC [US]  
• [A] EP 1352988 A1 20031015 - SIEMENS AG [DE]  
• [A] WO 2014126732 A1 20140821 - UNITED TECHNOLOGIES CORP [US]

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